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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/970,621      | 10/05/2001  | Takashi Tanaka       | 2001_1507A          | 1393             |

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EXAMINER

WILSON, LEE D

ART UNIT PAPER NUMBER

3723

DATE MAILED: 01/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/970,621

Applicant(s)

TANAKA ET AL.

Examiner

LEE D WILSON

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

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## DETAILED ACTION

### *Election/Restrictions*

1. Election Restriction withdrawn.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 12-14 and 22-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Katsumata et al (6161533).

Katsumata et al teach a method comprising of supplying a slurry from a feeding system (21), a tank (2), a pump (p22), and a controller (C1, the pump is suspended unless the device is operation with the detected values operationg the system opening up and delivering slurry, col.4, lines 36-39).

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In regard to claims 22, the claimed structure discloses an apparatus which is the result of applicants equation. The invention can have the slurry turned on and off at any time.

3. Claims 12-14 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyata et al (5799643).

Miyata et al teach a method comprising of supplying a slurry from a feeding system (21), a tank (2), a pump (p22), and a controller (C1, the pump is suspended unless the device is operation with the detected values operationg the system opening up and delivering slurry, col.4, lines 31-34).

In regard to claims 22, the claimed structure discloses an apparatus which is the result of applicants equation. The invention can have the slurry turned on and off at any time.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (6475070) in view of Miyata et al (5799643) .

1 White teaches a chemical mechanical polishing system comprising a slurry and polishing tables.

2. White does not teach a slurry having a tank, pump means, and control system.

3. Miyata et al a method comprising of supplying a slurry from a feeding system (21), a tank (2), a pump (p22), a controller (C1, the pump is suspended unless the device is operation with the detected values operationg the system opening up and delivering slurry, col.4, lines 31-34) which is used to provide automation control of the slurry supply to allow for strict control over delivery.

4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the White device by providing a slurry having a tank, pump means, and control system as taught by Miyata et al which is used to provide automation control of the slurry supply to allow for strict control over delivery.

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6. Claims 16-21 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (6475070) as applied to claims 12-15 above, and further in view of Laursen (US2002/0173232 A1).

1. White is discussed above.
2. White does not teach a method of mixing deionized water and slurries in a tank.
3. Laursen teaches a chemical mechanical polishing apparatus teaching the method of mixing deionized water and slurries which allows slurry concentrations to be altered using a deionized water. This reference also teaches inherently that it would be obvious to mix the slurry and deionized water in the slurry tank to obtain various slurry concentrations.
4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the White device by providing mixing deionized water and slurries in a tank as taught by Laursen which allows slurry concentrations to be altered using a deionized water.

### ***Response to Arguments***

**2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.**

- a. The election restriction has been removed and all claims have been considered under art.

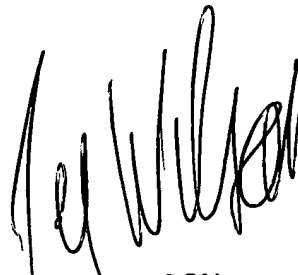
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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Wilson whose telephone number is (703) 305-4094.

ldw

January 12, 2004



**LEE D. WILSON**  
**PRIMARY EXAMINER**